

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

MAR 2 0 2008

(AE-17J)

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

Barbara Hodgson, Regional Environmental Manager Carmeuse Lime 3245 E. 103rd St. Chicago, Illinois 60617

Re:

Notice and Finding of Violation

Carmeuse Lime, Chicago, Illinois

Dear Ms. Hodgson:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to Carmeuse Lime (Carmeuse or you) under Section 113(a)(1) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1). We find that you are violating the New Source Performance Standards (NSPS) for Lime Manufacturing Plants at Title I, Section 111 of the CAA and its implementing regulations at 40 C.F.R. Part 60, Subpart HH, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing Plants at Title I, Section 112 of the CAA and its implementing regulations at 40 C.F.R. Part 63, Subpart AAAAA, Title V of the CAA and its implementing regulations at 40 C.F.R. Part 70, the Illinois State Implementation Plan, and the Title V Permit at your Chicago, Illinois facility.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action.

We are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 days following receipt of this notice. A conference should be held within 30 days following receipt of this notice. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

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The EPA contact in this matter is Natalie Topinka. You may call her at (312) 886-3853 to request a conference. EPA hopes that this NOV/FOV will encourage Carmeuse's compliance with the requirements of the Clean Air Act.

Sincerely yours,

Cheryl L Newton, Acting Director

Air and Radiation Division

cc: Ray Pilapil, Manager

Compliance and Enforcement Section

Illinois Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:		
Carmeuse Lime	NOTICE and FINDING OF VIOLATION	N
Chicago, IL	EPA-5-08-IL-06	
Proceedings Pursuant to Section 113(a)(1) of the Clean Air Act, 42 U.S.C.		
§ 7413(a)(1)		

NOTICE and FINDING OF VIOLATION

The U. S. Environmental Protection Agency is issuing this Notice and Finding of Violation (NOV/FOV) under Section 113(a)(1) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1). EPA finds that Carmeuse Lime (Carmeuse) is violating the New Source Performance Standards. (NSPS) for Lime Manufacturing Plants at Title I, Section 111 of the CAA and its implementing regulations at 40 C.F.R. Part 60, Subpart HH, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Lime Manufacturing Plants at Title I, Section 112 of the CAA and its implementing regulations at 40 C.F.R. Part 63, Subpart AAAAA, Title V of the CAA and its implementing regulations at 40 C.F.R. Part 70, its Title V Permit, the Illinois State Implementation Plan (SIP) and its Operating Program for Fugitive Particulate Matter Control as follows:

Regulatory Provisions

The permits, permit conditions, and regulatory provisions relevant to this NOV/FOV are as follows:

- Under 415 Illinois Compiled Statutes 5/39.5, on June 3, 2003, the Illinois
 Environmental Protection Agency (IEPA) issued Final Title V Permit No. 95090136
 to Carmeuse Lime, Inc. South Chicago Plant. The Title V permit contained the
 following provisions relevant to this NOV/FOV:
 - a. Section 5.2.3(a) states that the source shall be operated under the provisions of an operating program designed to significantly reduce fugitive particulate matter emissions.
 - b. Section 5.2.3(d) states that all roads, traffic pattern access areas, and parking facilities at the source shall be paved or treated with water, oils, or

chemical dust suppressants on a regular basis, as needed, in accordance with the operating program. All paved areas shall be cleaned on a regular basis.

- c. Section 5.2.6(c) indicates that the facility is subject to and required to comply with NESHAP Part 63, Subpart AAAAA for Lime Manufacturing Plants.
- d. Section 7.1.8(b) states that the opacity and the pressure drop across each baghouse of each affected kiln shall be monitored and recorded on a daily basis.
- e. Section 7.1.9(a) states that records of inventory and documentation of inspections, maintenance, and repairs of all baghouses shall be kept in accordance with condition 7.1.8(a) of the Title V permit.
- f. Section 7.2.3 (c)(ii) states that no owner or operator shall cause to be discharged into the atmosphere from any affected rotary lime kiln any gases which exhibit greater than 10 percent opacity when exiting from a baghouse.
- g. Section 7.2.6(a) states that the affected lime kiln shall not exceed 10 percent opacity when exiting from a baghouse.
- h. Section 7.2.9(c) states that Carmeuse shall maintain written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment for Kiln #5.
- i. Section 7.2.9(g) states that maintenance and repair records for Kiln #5 shall be kept and maintained for at least three (3) years and shall be available to IEPA representatives during working hours.
- j. Section 7.3.9(b)(1) states that Carmeuse shall keep written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment for each existing material handling unit.
- k. Section 7.4.9(c)(i) states that Carmeuse shall keep written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment for each new material handling unit.
- 1. Section 7.6.1 states that non-point source units, including unpaved roads, paved roads, coal, coke and limestone storage stockpiles are controlled by various wetting or crusting agents or operating procedures given in a plant-wide fugitive dust operating program designed to significantly

reduce particulate matter and PM_{10} emissions. The Fugitive Dust Operating Program is listed as the emission control equipment for these non-point source in Section 7.6.2.

- m. Section 7.6.3(b) states, in part, that all roads, traffic pattern access areas, and parking facilities at the source shall be paved or treated with water, oils, or chemical dust suppressants on a regular basis, as needed, in accordance with the operating program. All paved areas shall be cleaned on a regular basis.
- n. Section 7.6.5(a) states that Carmeuse's Fugitive Dust Operating Program includes several measures designed to significantly reduce fugitive dust emissions and is incorporated herein.
- o. Section 7.6.9(a)(ii)(F) states that Carmeuse shall maintain a log of incidents and a statement of explanation when control measures were not used to control emissions at affected fugitive emission sources.
- 2. On March 15, 1979, EPA issued to Carmeuse an Approval to Construct EPA-5-79-A-3 for rotary lime kiln number 5 (kiln #5). This Approval to Construct for kiln #5 was published in the Federal Register, Volume 44, No. 56, dated March 21, 1979 (44 Fed. Reg. 17215-16). The approval to construct requires that any gases from rotary lime kiln #5 which may be discharged into the atmosphere shall not exhibit an opacity of 10 percent or greater.
- 3. Carmeuse is subject to NESHAP Subpart AAAAA at 40 CFR Part 63, as specified in Section 5.2.6 (c) of the Title V permit.
 - a. 40 C.F.R. §63.7113(a) requires, among other things, installation of a continuous parametric monitoring system and a continuous opacity monitoring system (COMS).
 - b. 40 C.F.R. 63.7113(g)(1-2) requires that each COMS be installed at the outlet to the add-on control device and be installed, maintained, calibrated and operated in accordance with 40 C.F.R. Part 63, Subpart A, General Provisions and according to PS-1 of appendix B to 40 C.F.R. Part 60.
 - c. 40 C.F.R. Part 63, Subpart AAAAA, Table 5 (4)(a)(ii) requires collecting the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating for each 6-minute block period the average opacity does not exceed 15 percent.
 - d. 40 CFR §63.8 (c)(4) states that except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero

(low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements.

- e. 40 CFR § 63.7100(c) states that each Lime Manufacturing Plant must always operate and maintain the affected source, including air pollution control equipment, according to the provisions in 40 C.F.R. § 63.6(e)(1)(i).
- f. 40 CFR §63.6(e)(1)(i), states that at all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.
- 4. NSPS Subpart HH at 40 C.F.R. §60.340 states that each rotary lime kiln used in the manufacture of lime that commences construction or modification after May 3, 1977, is subject to the requirements of this subpart.
 - a. 40 CFR §60.342 (a)(2) states that emissions from any subject rotary lime kiln shall not exhibit greater than 15 percent opacity when exiting from a dry emission control device.
 - b. 40 C.F.R. 60.343(a) requires installation of a continuous monitoring system to monitor and record the opacity . . . of gases discharged into the atmosphere from any rotary lime kiln. It also requires the span of this continuous monitoring system be set at 40 percent.
- 5. The general provision of the NSPS at 40 C.F.R. §60.1(a) states that the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
 - a. 40 CFR §60.11(d) states that at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used

will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

b. 40 CFR §60.13(e) states that except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph
 (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements.

6. Illinois SIP.

- a. 35 Ill. Admin. Code § 201.141 states that no person shall cause or threaten or allow the discharge or emission of any contaminant into the environment in any State so as, either alone or in combination with contaminants from other sources, to cause or tend to cause air pollution in Illinois.
- b. 35 Ill. Admin. Code § 211.390 defines air pollution as the presence in the atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.
- c. 35 Ill. Admin. Code § 212.309 requires specified operations, including but not limited to storage piles, crushers, grinding mills, conveyors, storage bins, unloading, and transporting, must be operated under the provisions of an operating program.
- d. 35 Ill. Admin. Code § 212.306 requires, in part, that all normal traffic pattern access areas and roads which are located on manufacturing property be paved or treated. All paved areas must be cleaned on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Admin. Code § 212.309.
- 7. Sections 5.2.3 and 7.6 of the Title V permit require Carmeuse to develop and operate under the provisions of a Fugitive Particulate Matter Operating Program and a Fugitive Dust Operating Program, respectively. See also, 35 Ill. Admin. Code § 212, Part K. Appendix A of the Administrative Consent Order dated September 27, 2005 (CAA Docket No. CAA-05-2005-0051) requires Carmeuse to develop and implement a comprehensive operating program which includes the requirements of the Fugitive Particulate Matter Operating Program and the Fugitive Dust Operating Program to control fugitive dust at the facility. The comprehensive program is called the Operating Program for Fugitive Particulate Matter Control (OPFPMC).

Facility Information

- 8. Carmeuse owns and operates a lime manufacturing facility, located at 3245 East 103rd Street, Chicago, Illinois.
- 9. Carmeuse is a major source of hazardous air pollutants as defined at 40 C.F.R. § 63.2.
- 10. Carmeuse's facility is subject to the requirements of NSPS Subparts A and HH because rotary lime kiln No. 5 (Kiln #5) is used in the manufacture of lime and commenced construction after May 3, 1977.
- 11. EPA met with Chicago Department of Environment (DOE) on December 19, 2007, regarding numerous citizen complaints to Chicago DOE about fugitive dust emissions from Carmeuse's facility.
- 12. EPA conducted an inspection of Carmeuse Lime on January 3, 2008.
- 13. EPA reviewed several 2005 through 2007 Continuous Emission Monitoring System Quarterly Summary Reports for Kiln #5. EPA has not obtained quarterly excess emission reports for all quarters between 2004 and 2007. Selected results are summarized in Table 1.

Explanation of Violations

- 14. In its CAAPP Annual Compliance Certification for the records year 2006, submitted to EPA on May 3, 2007, Carmeuse reported intermittent compliance with the permit conditions listed in paragraph 1 of this NOV/FOV.
- 15. Carmeuse exceeded its 10 percent opacity limit for a total of at least 2,218 minutes in the first and third quarters of 2005 and the third quarter of 2007, in violation of permit condition 7.2.3(c)(ii) and Approval to Construct EPA-5-79-A-3.
- 16. Carmeuse exceeded the 15 percent opacity limit for at least 63 minutes during the first quarter, and at least 60 minutes during the third quarter of 2005, in violation of NSPS for Lime Manufacturing Plants at Title I, Section 111 of the Act with implementing regulations at 40 C.F.R. Part 60, Subpart HH, the NESHAP for Lime Manufacturing Plants at Title I, Section 112 of the Act with implementing regulations at 40 C.F.R. Part 63, Subpart AAAAA, Title V of the CAA and its implementing regulations at 40 C.F.R. Part 70, and its Title V Permit.
- 17. Downtime for the COMS for Kiln #5 totaled at least 22,011 minutes during the first and third quarters of 2005 and the third quarter of 2007, in violation of NSPS for Lime Manufacturing Plants at Title I, Section 111 of the Act with implementing regulations at 40 C.F.R. Part 60, Subparts A and HH and the NESHAP for Lime Manufacturing

Plants at Title I, Section 112 of the Act with implementing regulations at 40 C.F.R. Part 63, Subparts A and AAAAA, Title V of the CAA with implementing regulations at 40 C.F.R. Part 70, and the Title V Permit.

- During the January 3, 2008, inspection, EPA observed poor operation and maintenance of the lime manufacturing equipment leading to fugitive dust and particulate matter emissions, in violation of 40 CFR § 63.6(e)(1)(i), 40 CFR §60.11(d), the Title V Permit, Illinois SIP, and OPFPMC.
- 19. As observed during the January 3, 2008, EPA inspection, and based on numerous citizen complaints to Chicago DOE regarding fugitive dust emissions from the facility, Carmeuse caused, threatened or allowed the discharge or emission of contaminants into the air which tended to cause air pollution, in violation of 35 Ill. Admin. Code § 201.141.
- 20. During the January 3, 2008, inspection, EPA observed significant fugitive particulate matter and dust accumulation on process equipment and exterior surfaces in violation of the Title V Permit, Illinois SIP and OPFPMC.

Environmental Impact of Violations

21. Fugitive dust emissions increase public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

3/20/08 Date

Cheryl b. Newton, Acting Director Air and Radiation Division Table 1. Summary of Minutes of Emissions Exceeding 10% Opacity and Opacity Monitor Down Time for selected Quarters, 2005 & 2007.

Year	Quarter	Source Operating Time in Quarter (Minutes)	Excess Opacity (Minutes)	Excess Opacity (%)	COMS downtime (minutes)	COMS downtime (%)
2005	1	122,694	2,118	1.73	35	0.03
2005	3	71,402	64	0.09	13,331	18.67
2007	3	117,314	36	0.03	8,645	7.37
Total	3	311,410	2,218		22,011	

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent a Notice and Finding of Violation, No

EPA-5-08-IL-06, by Certified Mail, Return Receipt Requested, to:

Barbara Hodgson, Regional Environmental Manager Carmeuse Lime 3245 E. 103rd St. Chicago, IL 60617

I also certify that I sent copies of the Notice and Finding of Violation by first

class mail to:

Ray Pilapil, Manager
Compliance and Enforcement Section
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62794

Harish Narayen, Acting Regional Manager Region 1 Illinois Environmental Protection Agency 9511 West Harrison Street Des Plaines, IL 60016

on the 20 day of March_, 2008.

Betty Williams, Secretary

AECAS, (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0005 8920 1149